



le bison battle over a prospective mate. Neither wants to relinquish what he may have traveled a great distance to find.

# Snooty male bison are the pickier sex

Biologist says amorous bulls sniff out the most fertile mating prospects

**Michele Ostrove** 7-8-90  
National Geographic News Service

Five summers of chasing amorous bison through the South Dakota Badlands have taught Joel Berger an unexpected lesson about love in the animal kingdom:

When it comes to mating, males, not females, choose their partners. What are the shaggy, humpbacked animals looking for? Not good looks or personality, but a far more utilitarian quality — fertility.

Male bison search out the females that are most likely to give them an offspring within the next year, says Berger, a biologist at the University of Nevada and director of the study on bison reproductive behavior.

"This is an important discovery, because in virtually all species of mammals today, people have presumed females are the choosy ones," says. "Nobody has previously demonstrated that males may be as discriminating."

Berger's findings have led many biologists to suspect, as he says, that male selectivity may also apply to other mammals.

"This type of data is quite difficult to gather, so it's likely that other mammals also do similar things that we've been unable to observe," says.

I suspect most species have complex and subtle behaviors they use to



To mate or not to mate? The nose knows. A male bison sniffs a female candidate.

to Berger and his assistants. Because they had neither roads nor cars, they were covered as much as 14 miles a day on foot. Their work shifts began at 3:30 a.m. and ended at dusk.

The project offered its share of thrills. For real excitement, says researcher Carol Cunningham, nothing

surpasses being mobbed by a herd of curious bison — or being charged by an angry or surprised one.

"When you're surrounded, there's no way to get out; there are no trees to climb," she says, recalling numerous incidents of people being gored by bison in national parks. "All we could do was throw rocks and jump

up and down."

A bison running at you full tilt, eyes glaring and horns lowered, is a experience that leaves you shaking, Cunningham says. "You don't run. That would be the worst thing to do. You just stand your ground and hope the bluff works."

Fortunately for her, it always d



# usband, stances

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ouse?

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# Cure the common shoplifter — nuke 'em

## AT WIT'S END



**ERMA  
BOMBECK**

When I was in college, I wrote  
for the in-house magazine of a  
large department store. A thin wall  
separated our offices from the  
store's security force. All day long,  
a stream of shoplifters were  
brought there for questioning, giv-  
ing new meaning to the words  
"self-service." I couldn't help  
overhearing their bizarre stories,  
punctuated by tears and hysteria.

After a while, it wasn't enough  
to have store detectives, walkie-  
talkies and two-way mirrors in the fitting rooms.  
Filching was getting out of hand. The white plastic  
safety tag was born. I have often said if savings &  
loans could have protected their investors' monies  
with the same little white plastic safety tags, we  
wouldn't be in the mess we are in today.

A friend of mine bought and paid for a gauze dress,  
and when she got it home realized the salesperson  
had forgotten to remove the tag. It wasn't pleasant  
when the tag whacked her knees like an anchor with  
every step, but it was better than taking the garment  
back to the store. In the end, however, it was the  
public reaction to it that she couldn't live with. That  
white plastic tag made Hester's scarlet A look like a

piece of costume jewelry. People assumed she had  
stolen it.

Recently, stores unveiled a new weapon in the war  
against stealing that is like a grenade. It's called the  
"Inktag," and this is how it works. If the little white  
capsule attached to the garment is not removed by a  
special tool, three vials inside break and permanent  
ink sprays out. Not only is the garment ruined, but  
the person breaking the seal runs the risk of being cut  
by broken glass and jagged metal.

If this doesn't work, I don't know where we go  
from here. Maybe we're looking at the Bubble Button  
— a small, round piece of plastic that if not removed  
professionally will inflate the dress, coat or skirt like  
an air mattress, making it impossible to remove from  
the store. Or how about the Terminator Tag? When a  
shoplifter tries to twist it off, a mine explodes and the  
garment vanishes in a mushroom cloud.

All of this could get pretty ugly before a solution is  
found. We could possibly see clothes protected by an  
innocent-looking cap that when forced open would  
release the smell of sweat to penetrate the garment  
for the rest of its life.

I'd hate to see stores resort to the ultimate in weap-  
onry — a piece of plastic that is still on the drawing  
board. Without proper tools to remove it, the sub-  
stance inside changes the garment into a divided  
skirt. That's pretty inhumane — even for a war.

# Immediate CPR often can save lives

By Alton Thygerson



**THE SAFE LIFE**

March 4, 1990.

When Gathers collapsed on the  
court, millions of people witnessed a  
botched resuscitation, shown on tele-  
vision sports replays. Reports indi-  
cate that cardiopulmonary resuscita-  
tion (CPR) was not started for three  
to seven minutes after his collapse.  
Perhaps CPR would not have saved  
him, but the slowness in attempting  
resuscitation was not the way to care  
for him. Such situations demand a  
quicker response than Gathers re-  
ceived. There will be a next time, and  
responsible people should be able to  
react and respond quickly and  
properly.

Cardiac arrest (heart stoppage)  
can occur in people of any age and  
has many causes. Coronary blood  
vessels can become clogged, charac-  
teristically in older people, but can  
occur in younger people, especially  
those with a strong family history of  
early heart attack, diabetes, high

spasm, cardiac arrest and sudden  
death in young people. In addition,  
various conditions depriving the  
heart of oxygen or blood eventually  
cause cardiac arrest. Such conditions  
include severe respiratory distress  
(as in exercise-induced asthma), se-  
vere anemia, shock and certain poi-  
sons (e.g., carbon monoxide, cya-  
nide). Still other conditions  
producing cardiac arrest include  
drowning and electrocution.

Bystanders can best cope with car-  
diac arrest by: (1) recognizing the  
signs of cardiac arrest; (2) telephon-  
ing to activate the Emergency Medi-  
cal Services (EMS) system; and (3)  
providing immediate rescue proce-  
dures, which includes CPR.

## Cardiopulmonary resuscitation

The major objective of perform-  
ing CPR is to provide oxygen to the  
brain, heart and other vital organs  
until appropriate medical treatment  
(advanced cardiac life support) can  
restore normal heart and breathing  
action. Speed is critical to success.  
The highest survival rates happen in  
those for whom CPR was started  
within four minutes of the time of  
the cardiac arrest and who were pro-  
vided with advanced cardiac life sup-  
port measures within eight minutes  
of their cardiac arrest.

The CPR technique is widely  
taught by the American Heart Asso-

forming rescue breathing and (3)  
providing chest compressions.

1. Opening an airway. Since the  
back of the tongue is the most com-  
mon cause of airway obstruction in  
an unconscious victim, all that may  
be needed for someone not breathing  
is to move the lower jaw, which in  
turn moves the attached tongue. This  
is best done by tilting the head back  
and moving the lower jaw (chin) for-  
ward (known as the head-tilt/chin-  
lift method).

2. Breathing. If breathing does not  
start after the airway is opened, res-  
cue breathing is the quickest way to  
get oxygen into the victim's lungs. If  
the victim's heart is beating, give one  
breath for an adult victim once every  
five seconds. If the victim's heart is  
not beating, chest compressions will  
have to be provided, along with the  
rescue breathing.

3. Chest compressions. If no pulse  
can be felt at the carotid artery in the  
neck for adults, or the brachial ar-  
tery in the upper arm for infants,  
closed chest cardiac compressions  
are performed on the sternum, with  
the rescuer pushing down on an  
adult about 1½ to 2 inches. Perform  
15 chest compressions and then fol-  
low with two breaths.

The above material alone lacks de-  
tails about the CPR technique. The